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# (12) United States Patent

# Sutherland et al.

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#### (54) WARHEAD FUSE

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#### Related U.S. Application Data

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(2006.01)

(52) **U.S. Cl.** CPC ...... *F42C 15/34* (2013.01)

(58) Field of Classification Search

CPC ...... F42C 15/184; F42C 15/188; F42C 15/24; F42C 15/192; F42C 15/196; F42C 15/00; F42C 15/18; F42C 15/26; F42C 15/34; F42C 19/0838

USPC ..... 102/202.1, 221–222, 237, 244, 254–256, 102/231, 235, 245

See application file for complete search history.

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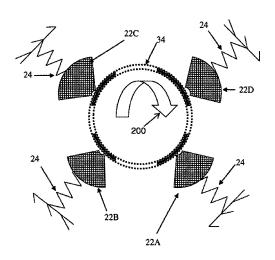
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### (57) ABSTRACT

A warhead fuse mechanism is used to prevent an accidental explosive event of a warhead by separating the booster lead into a plurality of booster lead segments, with each of the individual booster lead segments having a diameter less than the failure diameter of the booster lead explosive. A separating device separates the booster lead segments from each other to maintain the failure diameter until detonation is desired.

### 20 Claims, 7 Drawing Sheets

# Safe Mode



### Armed Mode

